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TITLE: Method and apparatus for identification of features associated with computers

ABPL:

Improved techniques for facilitating identification of a computer system's hardware features to software executing on the computer system are disclosed. In one embodiment, the software is system management software that serves to monitor and control the computer system to reduce failures and/or improve performance. In a general sense, the invention provides a system feature table within a computer system to describe each of the hardware features of the computer system, including feature data and appropriate access mechanisms for additional information. In addition, a user can be notified when the software does not support all the hardware features of the computer system. The invention also is able to identify locations of failing hardware features for easy replacement or examination.

BSPR:

Computer systems are known to include a variety of different hardware features. These hardware features also tend to be implemented differently in different computers (even from the same company). However, conventional software executing on the computers must understand not only the hardware features present but also how the hardware features are implemented in order to interact with the hardware features. One type of software that often interacts with hardware features of a computer system is known as system management software which monitors and controls the computer system to reduce system crashes or catastrophic failures or to improve performance.

BSPR:

Broadly speaking, the invention relates to improved techniques for facilitating identification of a computer system's hardware features to software executing on the computer system. The invention also monitors the computer system's hardware features to identify failing or degraded hardware features. In one embodiment, the software is system management software that serves to monitor and control the computer system to reduce failures and/or improve performance. In a general sense, the invention provides a system feature table (hardware resources table) within a computer system to describe each of the hardware features of the computer system, including feature data and appropriate access mechanisms for additional information. In addition, the software can notify a user when the software does not support all the hardware features of the computer system. The invention also is able to identify locations of failing hardware features for easy replacement or examination. Further, the hardware features are also able to be associated for redundancy purposes.

BSPR:

As a computer monitoring system, an embodiment of the invention includes: a computer system being monitored, the computer system includes a plurality of hardware features that provide presence and status information on the respective hardware features within the computer system; a system features table that stores feature information for the plurality of hardware features of the computer system, the feature information for each of the hardware features includes feature data that defines characteristics of the associated hardware feature, and an access mechanism and a position within the access mechanism for retrieving the presence information for the associated hardware feature; and software management software for performing system monitoring of the hardware of the computer system by retrieving the feature information on the respective hardware features from